

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

- 1 1. (Previously presented): A data network for communicating data between
2 a sender unit and a receiver unit, comprising:
 - 3 a core network including relay elements intercoupled by data links;
 - 4 a gateway element coupled to the core network and to the sender unit, the receiver
5 unit being coupled to the core network, the gateway element having at least one information
6 table identifying at least one route from the gateway element through the core network to the
7 receiver unit, including data links which constitute the at least one route, allocations of
8 predetermined communication resources of the data links, and status of the one or more data
9 links.
- 1 2. (Previously presented): A method of management of data communication
2 through a core network between a sender unit and a receiver unit that includes the steps of:
 - 3 defining at least one communicative route through the core network between the
4 sender unit and the receiver unit that includes a plurality of network links that each have a
5 predetermined communication resource;
 - 6 coupling the sender unit and the receiver unit to the core network with a sending
7 and receiving gateway element, respectively;
 - 8 allocating to the sending gateway element a first portion of the predetermined
9 communication resource of at least certain of the network links forming a communicative route
10 between the sending and receiving gateway elements, and maintaining at the sending gateway
11 element information indicative of the allocated predetermined communication resource;
 - 12 receiving at the sending gateway element a request from the sender unit for a data
13 transfer across the route, the request including a specification of requested communication
14 resource;

15 the sending gateway checking the information to grant the request if the
16 communicating capacity of the communicative route is available.

1 6. (Previously presented): The method of claim 2, wherein the
2 predetermined communication resource includes a communication bandwidth.

1 7. (Currently amended): A method of admission control of data to a core
2 network having a number of relay nodes interconnected by data links, ~~each of the data~~
3 ~~communicating links having a predetermined data communication capacity~~, the method
4 including the steps of:

5 associating a predetermined data communication capacity with each of the data
6 communicating links;

7 communicatively coupling sending and receiving gateway elements to the core
8 network;

9 connecting first and second data transfer elements to the sending and receiving
10 gateway elements, respecting, for data communication by a route through the core network
11 containing certain of the data links:

12 assigning first and second portions of the data communication capacity of at least
13 the certain of the data links to the sending and receiving gateway elements, respectively;

14 providing the sending gateway element with information indicative of the first
15 portion;
16 the sending gateway element responding to a request for data communication of a
17 requested capacity from the first data transfer element by checking the information, and granting
18 the request if the communication capacity of the certain data links is at least equal to or greater
19 than the requested capacity.

1 8. (Original): The method of claim 7, wherein the sending step includes re-
2 assigning at least a part of the second portion to the first portion of the data communication
3 capacity of at least one of the certain data links.

1 11. (Original): The method of claim 10, wherein the step of re-assigning
2 includes increasing the information indicative of the first portion by the part of the second
3 portion re-assigned to the first portion.

5 a data store comprising an information table of information indicative of a
6 predetermined communication resource associated with each network link;

7 a sending gateway element and a receiving gateway element respectively coupling
8 the first and second communicating entities to the core network;

9 assigning the sending gateway element a first portion of the predetermined
10 communication resource of at least certain of the network links forming a communicative route
11 between the sending and receiving gateway elements, and maintaining at the sending gateway
12 element information indicative of the allocated predetermined communication resource;
13 receiving at the sending gateway element a request from the sender unit for a data
14 transfer across the route, the request including a specification of requested communication
15 resource;
16 the sending gateway checking the information to grant the request if the
17 communicating capacity of the communicative route is available.